Thank You!

Thank you for purchasing an RF30 SmartCast wireless fishfinder from Humminbird, America's #1 Manufacturer of quality consumer marine electronics.

The RF30 SmartCast Wrist Sonar product comes in two models, the RF30 Wrist Mount, which has one RSS, and the RF30 SmartPack, which has two RSS units.

For the RF30 Wrist Mount model, you should have:

- One Remote Sonar Sensor - RSS(TM) - Channel A
- One SmartCast Wrist Sonar with installed 2450CR battery
- One extra 2450CR battery
- SmartCast Wrist Sonar Operations Manual.

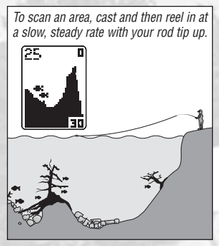
For the RF30 SmartPack model, you should have:

- Two Remote Sonar Sensors - RSS(TM) - Both Channel A
- One SmartCast Wrist Sonar with installed 2450CR battery
- One extra 2450CR battery
- RF30 SmartCast Wrist Sonar Operations Manual.

If any of these components are missing or are not included, please contact our Customer Resource Center at 1-334-687-0503.

Using the SmartCast

The SmartCast is a first-of-its-kind wireless fishfinder that is incredibly easy to use. Simply attach the Remote Sonar Sensor (RSS) to the end of your fishing line and cast it into the water as you would a normal float or lure. Then power on the SmartCast Wrist Sonar and you are ready to fish. The SmartCast system uses sonar technology to send sound waves from the RSS into the water. The returned "echoes" are transmitted with wireless technology to the Wrist Sonar and plotted on the LCD. New information appears on the right. As this information moves to the left a very accurate picture of the underwater world is created, including the display of underwater objects such as the bottom, fish, and structures, as well as the depth of the bottom.



NOTE: *The RF30 LCD is designed to be used with polarized sun-glasses only when the user is looking straight at the screen. You may not be able to read the LCD from other angles when wearing polarized sunglasses.*

Operational Modes

The RSS can be used in two distinct ways:

Sonar Graph: The RSS can be used to create a sonar graph of the bottom. Cast the RSS into the water beyond an area of interest. Retrieving the RSS slowly and steadily will produce a screen detailing structure, fish and bottom detail. Rhythmic wave action and rocking may cause the display of a rippled bottom.

Stationary Float: The RSS can be used as a float in a stationary location to monitor the area below, giving you a live update as fish approach your bait.

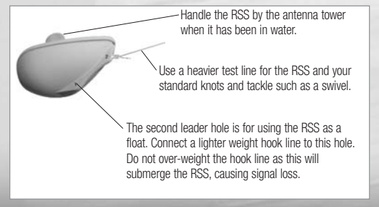
Activating the Wrist Sonar Battery



When you first use the RF30 SmartCast Wrist Sonar you will need to activate the display battery. Use a coin to remove the battery door on the back of the Wrist Sonar, then remove the plastic strip located in the battery compartment. Make sure that the O-ring in the battery compartment is present, positioned correctly in the grooves, and free of debris before re-installing the battery door to assure water resistance.

NOTE: *Replace the Wrist Sonar battery only with a 2450 CR-type battery. These batteries can be purchased from most electronics retailers.*

NOTE: *Under normal use you should expect the life of the display battery to last from 25 to 30 hours of operation. Operation in cold weather will significantly reduce the life of the battery.*





SMARTCAST™
WIRELESS FISHFINDERS

Attaching the RSS

The line coming from your reel can be tied off to the front hole in the green Remote Sonar Sensor (RSS). If you wish to also use the RSS as a conventional float, use the second hole to attach your hook using a lighter weight line. A snag will break the lighter line if you have to break free. Slip line techniques are not recommended because of the higher risk factor for loss of the RSS. If you do use the slip line method use a lighter weight line after the lower stop, enabling retrieval of the RSS if the lower line with hook breaks away.

CAUTION: You will increase the possibility of breaking your line if you use light test pound line on your reel. The RSS is positively buoyant (is buoyant under its own weight plus .2 ounces of bait and lead weight.) The maximum amount of weight for any attachment to the RSS is approximately 1/64 to 1/64 ounces, and includes the combined weight of any hook, line, weight, swivel/snap swivel and bait that is attached to the RSS. The RSS itself weighs 1 ounce, and therefore light test line might break.

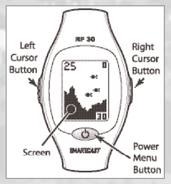
Store the RSS in a dry, non-metallic container, such as a tackle box, in a separate compartment, and isolated from any metallic devices.

RSS Power

The Remote Sonar Sensor (RSS) has a separate, non-replaceable lithium battery that has a shelf life of three years and will last for approximately 400 hours of in-water use. Discard the used RSS in compliance with local laws as you would any electronic component or battery.

The RSS has contacts that perceive when the device is immersed in the water. These contacts turn on the Sonar Transmitter/Receiver and begin transmitting the sonar information via RF to the display. The RSS automatically stops using power a few seconds after being pulled out of the water.

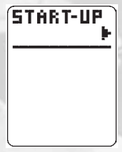
NOTE: *Store the RSS in a dry area when not in use to conserve power. Never place the RSS in a wet area of a boat or on a metal surface that could accidentally power it on. Also, if the RSS was used in salt water, rinse it with fresh water before final storage.*



Powering the Wrist Sonar Display ON and OFF

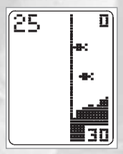
To turn on the display, press and hold POWER-MENU until you hear the beep, then release. Press and hold POWER-MENU until the display unit shuts down to power off.

CAUTION! *The Wrist Sonar display DOES NOT have an automatic shut off function. It will continue to draw current unless it is manually shut down by pressing and holding the POWER-MENU button.*

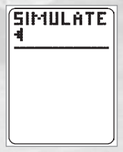


Startup in Fishing Mode

After pushing the POWER-MENU button to turn on the Wrist Sonar, you will see the Start-up screen. The Start-up screen will disappear automatically after two seconds have passed, without further action from you. In Fishing mode, the screen will either display sonar information or the RF30 SmartCast screen will appear, indicating that no sonar information is currently available (See Troubleshooting for more information about the RF30 SmartCast screen).



When you have powered on the Wrist Sonar and have cast the RSS into the water, returned sonar data will start to be displayed on the LCD. A vertical line will appear first, followed by a bottom depiction and possible fish locations if fish are sensed.

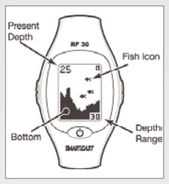


Startup in Simulator Mode

After pushing the POWER-MENU button to turn on the Wrist Sonar, and the Start-up screen is displayed, quickly press the Right Cursor Button to enter Simulator mode. Once you are in Simulator mode, the screen will show Simulate, and after two seconds, the screen will start to display simulated data. To exit Simulator mode, you must power down the Wrist Sonar.

Understanding the On-Screen Images

The SmartCast displays received underwater sonar information in an easy to understand format. The top of the display corresponds to the water surface, and the bottom of the display corresponds to the selected Depth Range (see Depth Range). The display varies as the area under the RSS changes. Reeling in the RSS at a slow and steady rate will allow you to graph the bottom for structure, detail and fish. Digital readouts provide precise information for bottom contour, depth and fish locations below the RSS.



If you are using SmartCast to graph an area, terrain and bottom composition variations are displayed on-screen. Fish and bait fish are displayed when detected. Underwater conditions vary greatly, so some experience and interpretation is needed to realize all the benefits of the SmartCast – use the picture above as a guide to the most common conditions and practice using the SmartCast over known bottom types.

Menu Features

A simple menu system accesses the adjustable features of the SmartCast Wrist Sonar display. To activate the menu system, press the POWER-MENU button; the first time you do this after power up, the Sensitivity menu will appear. Once the Wrist Sonar has been powered on, pressing the POWER-MENU button will display the last menu viewed. Press POWER-MENU repeatedly to access other SmartCast menu choices, one at a time. When a menu choice is on the display, use the RIGHT and LEFT Cursor buttons to adjust the menu settings. Menus are automatically removed from the screen after several seconds.

NOTE: *Menu settings are not saved in memory. All settings return to factory defaults when the SmartCast is turned off.*

Sensitivity



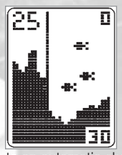
Press POWER-MENU until the Sensitivity menu appears. Select a higher number to show smaller sonar returns on-screen, or a lower number to remove clutter from the screen. Adjusting Sensitivity also affects how sonar returns not attached to the bottom are identified as Fish ID Symbols. Larger returns will be shown as fish at a lower setting. Increasing Sensitivity selects smaller returns to be identified as fish. Sensitivity settings range from 1 to 5. Default = 3.

Depth Range



Press POWER-MENU until the Depth Range menu appears. Select AUTO to have the SmartCast automatically set the Depth Range. Select 10,15, 20, 30, 60 or 100ft. to set a manual depth range. This locks the depth range to a specific setting. Default = AUTO.

NOTE: *In manual operation, if the water depth is greater than the depth range setting, the bottom will not be visible on-screen. Select AUTO to return to automatic operation.*



Depth Scale changes or signal loss will cause lines with missing detail and/or abrupt changes in the graphed bottom. When the Depth range is set to AUTO, the depth is set to keep the bottom in the lower third of the screen. The screen image jump shown here is due to an automatic change in depth. New returns graphed at a different scale will not match up with the historic data already graphed at a higher or lower scale. Vertical lines can also occur as the radio signal from the RSS is lost and then regained in rough water conditions.

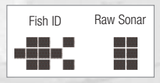
Fish Alarm



Press POWER-MENU until the FISH ALARM menu appears. Select OFF for no fish alarm, or ON for fish alarm. Fish ID must be set to ON for Fish Alarm to work. Default = OFF

Fish ID





Press POWER-MENU until the FISH ID menu appears. Select either OFF to view "raw" sonar returns, or ON to take advantage of SmartCast's ability to identify sonar returns that are determined to be fish. The sensitivity setting also affects the definition of sonar returns as fish (see Sensitivity). Fish Alarm does not sound if Fish ID is turned off. Default = ON

Channel



Press POWER-MENU until the CHANNEL menu appears. Select either A or B to match your RSS. See Channel A and B RSS Units. Default = Channel A

Channel A and B RSS Units

There are two versions of the RSS that are available at your local tackle dealer, major outdoor retailers, or at **www.humminbird.com**: Channel A and Channel B.

The Channel A RSS unit comes standard with the RF30 Wrist Mount and SmartPack SmartCast products. You also have the option to purchase additional Channel A or Channel B RSS. When using the A or B version of the RSS, make sure to select the appropriate channel in the Channel menu of your Wrist Sonar display.

The A & B Channel Option is intended to give you the flexibility to change to a different channel if another angler is using a SmartCast product within 100 feet of your display. Two Channel A or two Channel B RSS units in the water within 100 feet of the display will cause RF interference that prevents the product from functioning properly, resulting in fluctuating depth readings and excessive clutter on the screen. If you use a Channel B RSS while another angler is using an Channel A RSS or vice versa, the interference will be reduced but not completely eliminated.

NOTE: *RSS units, regardless of Channel, either in close proximity to each other or to other sonar devices (closer than 40 feet) can also experience or cause sonar interference, which may result in erratic depth readings.*

Maintenance

Your SmartCast is designed to provide years of trouble-free operation with virtually no maintenance. Follow these simple procedures to ensure your SmartCast continues to deliver top performance.

After using the RSS in salt water, wipe the affected surfaces with a cloth dampened with fresh water. The RSS Wet Switch™ pins must be rinsed with fresh water after exposure to salt water to prevent corrosion.

If the Wrist Sonar comes into contact with salt spray, wipe the affected surfaces with a cloth dampened with fresh water. When cleaning the LCD protective lens, use a chamois and non-abrasive, mild cleaner. Do not wipe while dirt or grease is on the lens. Be careful to avoid scratching the lens. Do not use a chemical glass cleaner on the lens, as this may cause it to crack.

If your RSS remains out of the water for a long period of time, it may take some time to wet it when returned to the water. Small air bubbles can cling to the surface of the RSS and interfere with proper operation. These bubbles dissipate with time, or you can wipe the face of the RSS with a wet cloth.

Never leave the RF30 SmartCast product in a closed car or trunk - the extremely high temperatures generated in hot weather can damage the electronics.

Troubleshooting

Do not attempt to repair the RF30 Wrist Sonar or RSS yourself. There are no user serviceable parts inside, and special tools and techniques are required for assembly to ensure the waterproof integrity of the housings. Repairs should be performed only by authorized Humminbird technicians.

Many requests for repair received by Humminbird involve units that do not actually need repair. These units are returned "no problem found." If you have a problem with your SmartCast, use the following troubleshooting guide before calling the Customer Resource Center or sending your unit in for repair.

NOTE: *Retrieving the RSS too rapidly, or the repetitive rocking motion of rough water, can result in loss or distortion of the bottom picture. This will cause intermittent screen display. For best bottom detail, perform a smooth and slow reel-in with constant speed and the rod tip up (holding the rod tip low or using a heavy line may cause the RSS to submerge and momentarily lose radio contact). The RSS has a maximum transmit range of 75 feet. If the unit is cast or drifts more than 75 feet away from the receiver, the signal may be inconsistent or lost.*

1. The SmartCast loses signal.



If you are not able to get an RF signal from the RSS, the display will stop updating (the screen will freeze) and the RF30 SmartCast screen will be displayed. Whenever reception is lost or the RSS emerges from the water for more than a few seconds, the RF30 SmartCast screen will be displayed until the RSS is placed back in the water and reception is regained.

- The Smartcast system is a line-of-sight wireless product. If objects are placed between the RSS and the Wrist Sonar, including your own wrist, the reception may be lost.
- The RF30 depth range is 2 to 100 feet (.6 to 30 meters). Erratic readings may occur in water that is shallower than 2 feet. In addition, because of the nature of sonar, this product is not intended for use in swimming pools or small enclosed bodies of water.
- Reeling the RSS too fast can cause loss of signal and the screen will freeze
- Check the buoyant balance between the RSS and your tackle; over .2 ounce will submerge the RSS, causing signal loss.

2. Nothing happens when I turn the Wrist Sonar on.

Check the battery position and make sure that the battery door is properly closed. Also, make sure that you have removed the plastic strip that is located in the battery compartment when it is new.

If this doesn't help, replace the battery. After replacing the battery, if the unit still doesn't power up, remove the battery door again and re-install.

3. When in very shallow water, I get gaps in the bottom reading and inconsistent digital depth indication.

The SmartCast will work reliably in water 2' (.6 m) or deeper. The depth is measured from the RSS. A transmitter (RSS) to receiver (Wrist Sonar) distance of greater than 75' may cause intermittent screen display. Overly rough water may cause the RSS to submerge, again losing contact.

Be sure to include the RSS if returning the unit for repair.

4. The screen begins to fade out. Images are not as sharp as normal.

Check the battery position and make sure that the battery door is properly closed. Also, make sure that you have removed the plastic strip that is located in the battery compartment when it is new.

If this doesn't help, replace the battery. After replacing the battery, if the unit still doesn't power up, remove the battery door again and re-install.

5. The display shows many black dots at high sensitivity settings.

You are seeing noise or interference caused by one of several sources. Noise can be caused by other electronic devices. Turn off any nearby electronics and see if the problem goes away. Other sonar devices or any electronic device operating in the 900 mHz range could cause interference with your SmartCast.

6. The display shows fluctuating depth readings and excessive clutter, including vertical bars that may be drawn on top of fish icons.

The SmartCast system comes with the capability to receive separate signals from Channel A RSS or a Channel B RSS. Two A- or B-type RSS units used simultaneously, as well as one A- and one B-type RSS unit used simultaneously, can cause RF interference between each other.

7. The screen jumps and the bottom has an abrupt change; sometimes a vertical line is missing or a black line from top to bottom is displayed.

This screen image jump is due to an automatic change in depth. New returns graphed at a different scale will not match up with the historic data already graphed at a higher or lower scale. Vertical lines can also occur as the radio signal from the RSS is lost and then regained in rough water conditions.

Techsonic Industries 6 Month Limited Warranty

We warrant to the original retail purchaser that Techsonic Industries products have been manufactured free from defects in materials and workmanship. This warranty is effective for six months from the date of original retail purchase, excepting that where Techsonic Industries products are used commercially or in any rental or other income producing activity; then this warranty is limited to ninety days from the date of original purchase for mechanical and electrical products.

We will provide replacement product without charge for any Techsonic Industries product not covered by this warranty, which is returned (freight prepaid) within the warranty period to the dealer from whom such products were purchased, or to us at the appropriate address. In any such case, Techsonic Industries products found to be defective and covered by this warranty will be replaced or repaired at Techsonic Industries' option, and returned to the customer.

Techsonic Industries' sole responsibility under this warranty is limited to the repair or replacement of product which is, in Techsonic Industries' opinion, defective. Techsonic Industries is not responsible for charges connected with the removal of such product or reinstallation of replacement or repaired parts.

We will have no obligations under this warranty for any product which has been:

- improperly installed;
- used in an installation other than as recommended in our installation or operation instructions or specifications;
- damaged or has failed due to an accident or abnormal operation including racing, misuse or alterations outside our factory;
- repaired or modified by entities other than Techsonic Industries;
- used on an engine/boat combination where the engine horsepower exceeds the rating established by the boat manufacturer;
- used with other product(s) which, in Techsonic Industries opinion, are incompatible with the Techsonic Industries product.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES ON THE PART OF Techsonic Industries AND WILL BE THE CUSTOMER'S EXCLUSIVE REMEDY EXCEPT FOR ANY APPLICABLE IMPLIED WARRANTIES UNDER STATE LAW WHICH ARE HEREBY LIMITED IN DURATION TO six months FROM THE DATE OF ORIGINAL PURCHASE. IN NO EVENT WILL Techsonic Industries BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY RELATING TO THE PRODUCTS.

Some states do not allow limitations on an implied warranty, or the exclusion of incidental or consequential damages, so the above exclusions may not apply to you. You may also have other rights which vary from state to state.

You must contact our Customer Resource Center to receive a repair authorization number before sending your SmartCast RSS or Wrist Sonar to our factory for service. This authorization number should be included on the shipping label when returned to our factory. In addition, a letter describing the problem you are experiencing, along with your name, address and daytime telephone number must be included, so that we can contact you about your repair if necessary.

International Purchases

A separate warranty is provided by international distributors for units purchased outside the United States. This warranty is included by your local distributor and this distributor maintains local service for your unit. Warranties are only valid in the area of intended distribution. Units purchased in the United States or Canada must be returned to our factory in the United States for service. This product is approved for use only in the United States, Canada and Australia . Use in any other country may violate local communi-cations regulations.

SERVICE POLICY

This Service Policy is valid in the United States only. This applies to Humminbird units returned to our factory in Eufaula, Alabama, and is subject to change without notice.

All repair work is performed by factory-trained technicians to meet exacting factory specifications. Factory serviced units go through the same rigorous testing and quality control inspection as new production units.

Even though you'll probably never need to take advantage of our incredible service guarantee, it's good to know that we back our units this well. We do it because you deserve the best. We will make every effort to repair your unit within three working days from the receipt of your unit. This does not include shipping time to and from our factory. Units received on Friday are usually shipped by Wednesday, units received Monday are usually shipped by Thursday, etc.

We reserve the right to deem any product unserviceable when replacement parts are no longer reasonably available or impossible to obtain.

After the original warranty period, a standard flat rate service charge will be assessed for each repair (physical damage and missing parts are not included). Please call our Customer Resource Center to verify the service charge for your unit.

If charges are not prepaid, the unit will be returned C.O.D. If you are experiencing problems related to bottom or depth readings, please send your RSS (Remote Sonar Sensor) along with your Wrist Sonar when sending for repair.

Customer Resource Center

If you have any questions or would like to order replacement RSS units, visit Product Support on the Web at:

www.humminbird.com

or call our Humminbird
Customer Resource Center Hotline:
1-334-687-0503

Throughout the U.S. and Canada, hours are Monday-Friday, 8:00 a.m. to 4:30 p.m. Central time.

Humminbird
Service Department
108 Maple Lane
Eufaula, AL 36027

FCC ID: ICLSMC1

Techsonic Industries

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference and;
(2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION: *Changes or modifications not expressly approved by Techsonic Industries could void the users authority to operate the device.*

WARNING! *The RSS (Remote Sonar Sensor) is not intended for use by children younger than 6 years old without adult supervision as the RSS may represent a choking hazard to small children. The electronic parts in the Remote Sonar Sensor (RSS) are made to withstand use when casting into water. Because shock from abrupt contact with rocks can damage your RSS we recommend using this sensor in water 1 foot and deeper. Do not place the RSS in a wet area when not in use as this will turn on the RSS and shorten its usable life. The bottom of the RSS should not be handled during sonar operation. This product is approved for use only in the United States, Canada and Australia. Use in any other country may violate local communications regulations.*

WARNING! *Disassembly and repair of this electronic unit should only be performed by authorized service personnel. Any modification of the serial number or attempt to repair the original equipment or accessories by unauthorized individuals will void the warranty. Handling and/or opening this unit may result in exposure to lead, in the form of solder. Contact with active sonar transmitters may cause discomfort and/or mild tissue distress.*

WARNING! *This product contains lead, a chemical known to the State of California to cause cancer and birth defects and other reproductive harm.*

SPECIFICATIONS

Power Requirement:	One 2450CR Wrist Sonar Battery
	One non-replaceable Lithium RSS Battery
Display Matrix	48 X 32 Pixels
Display Type	STN
Depth Capability	100 ft
Sonar Coverage	90°@-10 dB*
Sonar Operating Frequency	120 kHz
Operational Radio Frequency	916.5 mHz
Operational Range	75 ft

**Area of bottom coverage equals twice the current depth.*